

PTO/SB/21 (08-03)

**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Application Number	09/747,779
Filing Date	December 22, 2000
First Named Inventor	Kim, Hong Koo
Art Unit	2814
Examiner Name	Marcos D. Pizarro Crespo
Attorney Docket Number	000939-073311US

Total Number of Pages in This Submission:

**ENCLOSURES (Check all that apply)**

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard
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Remarks

The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual	Townsend and Townsend and Crew LLP Steve Y. Cho	Reg. No. 44,612
Signature		
Date	2/23/04	

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Andrea S. Beck		
Signature		Date	2/23/04



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FEB 27 2004  
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PTO/SB/17 (10-03)

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 110

Complete if Known

Application Number 09/747,779  
Filing Date December 22, 2000  
First Named Inventor Kim, Hong Koo  
Examiner Name Marcos D. Pizarro Crespo  
Art Unit 2814  
Attorney Docket No. 000939-073311US

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MAR 08 2004

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number

20-1430

Deposit  
Account  
Name

Townsend and Townsend and Crew LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
		1001	770	Utility filing fee	
		1002	340	Design filing fee	
		1003	530	Plant filing fee	
		1004	770	Reissue filing fee	
		1005	160	Provisional filing fee	

SUBTOTAL (1)

(\$)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
	** =		
Independent Claims	** =		
Multiple Dependent	X		

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description
		1202	18	Claims in excess of 20
		1201	86	Independent claims in excess of 3
		1203	290	Multiple dependent claim, if not paid
		1204	86	** Reissue independent claims over original patent
		1205	18	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large	Entity	Small	Entity	Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	110
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Petitions related to provisional applications	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

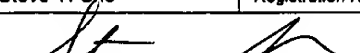
Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid SUBTOTAL (3)

(\$110)

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type) Steve Y. Cho Registration No. (Attorney/Agent) 44,612 Telephone 650-326-2400  
Signature  Date 2/23/04

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.



PROVISIONAL APPLICATION



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Attorney Docket No. 000939-073310US

"Express Mail" Label No. EL496155617US

Date of Deposit: 12/27/99

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above, addressed to:

Assistant Commissioner for Patents  
Box Provisional Patent Application  
Washington, D.C. 20231

By: *Kim DeGey* *Pan*

ASSISTANT COMMISSIONER FOR PATENTS  
BOX PROVISIONAL PATENT APPLICATION  
Washington, D.C. 20231

Sir:

Transmitted herewith for filing is a provisional patent application under CFR 1.53(b)(2) of:

LAST NAME	FIRST NAME	MIDDLE INITIAL	RESIDENCE (City/State/Country)
Kim	Hong Koo		Pittsburgh, Pennsylvania, United States

Title: FABRICATION METHOD AND STRUCTURE FOR FERROELECTRIC NONVOLATILE MEMORY FIELD EFFECT TRANSISTOR

Enclosed are:

- ☒ 5 pages specification.
- ☒ 3 pages claims.
- ☒ 1 page Abstract.
- ☒ 16 sheet(s) of [ ] formal [ X ] informal drawing(s).
- ☒ Attached article titled "Growth of highly oriented Pb(Zr,Ti)O<sub>3</sub> films on MgO-buffered oxidized Si substrates and its application to ferroelectric nonvolatile memory field-effect transistors".
- ☒ Information Disclosure Statement (including Form PTO-1449 and 14 refs.)
- ☐ A verified statement to establish small entity status under 37 CFR 1.9 and CFR 1.27.
- ☐ The invention was made by or under a contract with the following agency of the United States Government: \_\_\_\_\_ under Government contract number \_\_\_\_\_

☒ Postcard

Please charge Deposit Account No. 20-1430 as follows:

- ☒ Filing fee \$ 150.00
- ☒ Any additional fees associated with this paper or during the pendency of this application.

2 extra copies of this sheet are enclosed.

Customer No. 20350

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Respectfully submitted,

TOWNSEND and TOWNSEND and CREW LLP

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